

State the domain, range, holes, vertical asymptotes, horizontal asymptotes, slant asymptotes, x-int and y-int. Anywhere you see (calc) use your graphing calculator to answer that part.

1.  $f(x) = \frac{x-1}{x^2-x-6}$

2.  $f(x) = \frac{2x^2-2}{x^2-4}$

3.  $f(x) = \frac{x^2-2x-3}{x+2}$

4.  $f(x) = \frac{x^2+x-6}{x+3}$

Domain:

Domain:

Domain:

Domain:

Range(calc):

Range(calc):

Range(calc):

Range:

Holes:

Holes:

Holes:

Holes:

Vertical Asy:

Vertical Asy:

Vertical Asy:

Vertical Asy:

Horizontal Asy:

Horizontal Asy:

Horizontal Asy:

Horizontal Asy:

Slant Asy:

Slant Asy:

Slant Asy:

Slant Asy:

x-int:

x-int:

x-int:

x-int:

y-int:

y-int:

y-int:

y-int:

5.  $f(x) = \frac{2x^2+5x+3}{x^2-1}$

6.  $f(x) = \frac{3x+6}{x^3-4x}$

7.  $f(x) = \frac{-3x^2-4x+4}{x^2-4}$

8.  $f(x) = \frac{x^3-x^2-9x+9}{x^2+4x+3}$

Domain:

Domain:

Domain:

Domain:

Range:

Range(calc):

Range:

Range(calc):

Holes:

Holes:

Holes:

Holes:

Vertical Asy:

Vertical Asy:

Vertical Asy:

Vertical Asy:

Horizontal Asy:

Horizontal Asy:

Horizontal Asy:

Horizontal Asy:

Slant Asy:

Slant Asy:

Slant Asy:

Slant Asy:

x-int:

x-int:

x-int:

x-int:

y-int:

y-int:

y-int:

y-int: